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09/693,575	10/19/2000	Djuphammar O. Hakan	253/099	8163

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EXAMINER

JUNTIMA, NITTAYA

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.D

Office Action Summary

Application No.

09/693,575

Applicant(s)

HAKAN, DJUPHAMMAR O.

Examiner

Nittaya Juntima

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-14 and 39-42 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 8, 15, 16, 18, 20, 21, 24, 25, 29-33, 36-38, 43, 45, 47-53 and 56-60 is/are rejected.
- 7) ☒ Claim(s) 3-6, 9-11, 17, 19, 22, 23, 26-28, 34-35, 44, 46, 54 and 55 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed on 9/2/2005.
2. The objections to the claims are withdrawn in view of applicant's amendment.
3. Claim 12-14, and 39-42 are allowed. The prior art alone or in combination fail to teach or make obvious on the following when considered in combination with other limitations in the claim: tuning the terminal to an HDR carrier and establishing the packet data communication on a HDR/best-effort carrier if the HDR/best-effort carrier is available as recited in claims 12 and 39.
4. Claims 32, 36, and 45 are now rejected under 35 U.S.C. 102(e).
5. Claims 1-2, 7-8, 15-16, 18, 20-21, 24-25, 29-31, 33, 37-38, 43, 47-53, and 56-60 are presently rejected under 35 U.S.C. 103(a) are rejected under 35 U.S.C. 103(a).
6. Claims 3-6, 9-11, 17, 19, 22-23, 26-28, 34-35, 44, 46, and 54-55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim objections

7. Claims 20 and 21 are objected to due to the following informalities:
 - in claim 20, line 1, "communication is" should be changed to "communications are" to avoid antecedent basis; and
 - in claim 21, line 5, "network" should be inserted following "an HDR" to put the claim in a better form.

Appropriate correction is required.

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Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 32, 36, and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by

Mazur et al. ("Mazur") (USPN 6,463,054 B1).

Regarding claim 32, Mazur teaches a method comprising:

tuning the terminal (the MS) to the best-effort carrier (not defined, reads on a 200 kHz carrier) in the best-effort network (not defined, reads on the 200kHz network, col. 2, lines 12-17) (the MS must tune to a 200 kHz in order to be connected for packet data transfer, col. 5, lines 30-32),

establishing a packet data communication (packet data transfer) over the best-effort carrier using the terminal (the MS is connected for packet data transfer, col. 5, lines 10-17 and 30-32);

while the packet data communication is in progress, tuning the terminal to the all-service carrier (not defined, reads on a 30kHz carrier) in the all-service network (not defined, reads on the 30kHz network, col. 2, lines 12-17) (while connected for packet data transfer mode, the MS tunes to the selected 30kHz DCCH to check for the cell specific information, col. 5, lines 30-42);

establishing all-service communication on the all-service carrier (the MS tunes to and decodes the selected DCCH to obtain the cell specific information, col. 5, lines 35-38).

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Regarding claim 36, it is inherent that the all-service communications are a broadcast information communication in order to allow the MS to tune to and decode the cell specific information on the selected DCCH (col. 5, lines 30-38).

Regarding claim 45, Mazur teaches tuning to the all-service carrier, while a packet data communication is taking place over the best-effort carrier, and establishing an all-service communication over the all-service carrier (the MS tunes to the selected DCCH on the 30 kHz network, while the MS is connected for packet data transfer, and decodes the selected DCCH to obtain cell specific information, col. 5, lines 10-15, 30-38).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 24, 25, 29, 33, 43, 47, 50, 51, 52, 53, 56, 57, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazur et al. ("Mazur") (USPN 6,463,054 B1).

Regarding claim 24, Mazur teaches a method comprising:

tuning the terminal (the MS) to the best-effort carrier (not defined, reads on a 200 kHz carrier) in the packet-switched network (not defined, reads on the 200kHz network, col. 2, lines 12-17) (the MS must tune to a 200 kHz in order to be connected for packet data transfer, col. 5, lines 30-32),

establishing a packet data communication (packet data transfer) over the best-effort carrier (the MS is connected for packet data transfer, col. 5, lines 10-17 and 30-32);

tuning the terminal to the all-service carrier (not defined, reads on a 30kHz carrier on the 30kHz network) in the all-service network (not defined, reads on the 30kHz network, col. 2, lines 12-17) for a limited time in order to check for incoming all-service communications (the MS tunes to the selected 30kHz DCCH to check for the cell specific information then returns to the 200kHz network, col. 5, lines 35-42, see also col. 2, lines 12-17).

The difference between the claim and the teaching of Mazur is that Mazur does not explicitly teach that the tuning is performed periodically as recited in the claim.

However, Mazur further teaches that (i) the MS periodically scans the control channels on the 30 kHz (Abstract, lines 12-16), and (ii) after a search for strongest DCCH in step 120 of Fig. 1, if it is determined that a neighboring cell is more suitable, the cell reselection is performed, step 125, i.e. the MS tunes to and decodes the selected DCCH to obtain the cell specific information, step 130 (col. 5, lines 30-38, see also Fig. 1, steps 120-130 and claim 2).

Therefore, it would have been obvious to one skilled in the art the time the invention was made to modify the teaching of Mazur to include that the tuning to an all-service carrier be performed periodically. The motivation/suggestion to do so would have been to enable the MS to perform the multiple cell reselections after a number of consecutive 30kHz searches, e.g. two consecutive cell reselections are performed resulted from two consecutive searches.

Regarding claim 25, Mazur teaches establishing an all-service communication over the all-service carrier when an incoming all-service communication is detected (the MS tunes to and decodes the selected DCCH to obtain the cell specific information, col. 5, lines 35-38), and

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tuning the terminal back to the best-effort carrier when the all-service communication is terminated (after obtaining the cell specific information on the selected DCCH, the MS returns to camping on 200 kHz packet mode, col. 5, lines 35-42).

Regarding claim 33, Mazur teaches tuning the terminal back to the best-effort carrier when the all-service communication is terminated (after obtaining the cell specific information on the selected DCCH, the MS returns to camping on 200 kHz packet mode, col. 5, lines 35-42).

Mazur fails to explicitly teach that the purpose of turning the terminal back to the best-effort carrier is to complete the packet data communication.

However, Mazur further teaches that the MS was connected for packet transfer mode prior to performing the 30kHz search and cell reselection, and returns to camping on 200kHz packet mode (col. 5, lines 10-17 and 30-42). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to modify the teaching of Mazur to include that the terminal is tuning back to the best-effort carrier in order to complete the packet data communication as recited in the claim. The suggestion/motivation to do so would have been to allow the terminal to return to complete the packet data communication to avoid any further interruption on the packet data transmission.

Claims 29 and 47 contain similar limitation recited in claim 36, therefore, is rejected under the same reason set forth in the rejection of claim 36.

Regarding claim 43, Mazur teaches a terminal (MS) comprising:

a transceiver configured to selectively tune to a best-effort carrier (not defined, reads on a 200 kHz carrier) in a packet-switched network (not defined, reads on the 200kHz network, col. 2, lines 12-17) or to an all-service carrier (not defined, reads on a 30kHz

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carrier) in an all-service network (not defined, reads on the 30kHz network, col. 2, lines 12-17) (since the MS first tune to a 200 kHz carrier in the 200 kHz network and then to a 30kHz carrier in the 30kHz network, Fig. 1 and col. 5, lines 46-61, the MS must include a transceiver in order to tune to the respective carriers); and

a processor which must be included to perform the steps similar to those recited in claim 25 without the step of tuning back to the HDR carrier (see rejection of claim 25).

Regarding claims 50 and 56, Mazur teaches that the all-service carrier supports real-time and non-real-time services (the 30kHz supports circuit and packet switched call, col. 6, lines 5-8), and the best-effort carrier supports only non-real-time services (the 200 kHz supports only col. 5, lines 10-17).

Regarding claims 51 and 57, Mazur further teaches that the all-service carrier is optimized for circuit switched services (the 30 kHz supports circuit switched communications, therefore, it must be optimized for circuit switched services, col. 2, lines 4-17), and the best-effort carrier optimized for best effort packet data services (the 200 kHz supports packet-switches communications, therefore, it must be optimized for packet switched services, col. 2, lines 4-17).

Regarding claims 52 and 58, since the best-effort carrier (the 200 kHz carrier) is using the TDMA protocol (col. 2, lines 4-17 and col. 4, lines 37-41), therefore, its control and data channels must be time multiplexed.

Regarding claim 53, Mazur teaches a wireless network comprising:

an all-service carrier in an all-service network (not defined, reads on

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a 200 kHz carrier in the 200kHz network, col. 2, lines 12-17 and col. 5, lines 10-13) configured to carry all-service communications (1xRTT/all-service communications read on decoding of the DCCH on the 30kHz network for cell specific information, col. 5, lines 30-38) and packet data communications (read on packet switched call, col. 6, lines 5-8);

a best-effort carrier in a packet-switched network (not defined, reads on a 30kHz carrier on the 30kHz network, col. 2, lines 12-17 and col. 5, lines 10-13) configured to carry packet data communications (packet data transfer, col. 5, lines 10-17 and 30-32);

a plurality of terminals (the mobile terminals, col. 4, lines 37-41) configured to perform the steps similar to those recited in claim 25 without the step of tuning back to the HDR carrier (see rejection of claim 25).

12. Claims 1, 2, 7, 8, 15, 16, 18, 20, 21, 30, 31, 37, 38, 48, 49, 59, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazur et al. ("Mazur") (USPN 6,463,054 B1) in view of the admitted prior art (Background of the Invention section in the specification).

Claims (i) 1, 30, 31, (ii) 8, (iii) 18, and (iv) 20 are method claims corresponding to method claims 24, 33, 45, and 29, respectively, therefore, are rejected under the same reason set forth in the rejection of claims 24, 33, 45, and 29, respectively, with the exception that Mazur does not teach that the HDR carrier in the HDR network and the 1xRTT carrier in the 1xRTT network correspond to the best-effort carrier in the packet-switch network and the all-service carrier in the all-service network, respectively.

However, the admitted prior art teaches a HDR carrier in a HDR network (control and data channels are time multiplexed and is optimized for best effort packet data transmission page

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1, lines 25-page 2, line 5), and a 1xRTT carrier in a 1xRTT or CDMA2000 network (optimized for circuit switched services, page 1, lines 16-24).

Therefore, it would have then been obvious to one skilled in the art at the time the invention was made to modify the teaching of Mazur to include the HDR carrier in the HDR network and the 1xRTT carrier in the 1xRTT network, e.g. by applying the method steps applied to the 30kHz carrier in the 30kHz network and the 200 kHz carrier in the 200 kHz of Mazur to the 1xRTT carrier in a 1xRTT network and the HDR carrier in a HDR network of the admitted prior art, respectively. The motivation/suggestion to do so would have been to enable one skilled in the art to apply the teaching of Mazur in other protocols which include CDMA or some hybrid of any of the TDMA, CDMA, FDMA as suggested by Mazur (col. 4, lines 37-46).

Claims (i) 2, 16 and (ii) 7, 37, 38 are method claims corresponding to method claims 25 and 32, respectively, therefore, are rejected under the same reason set forth in the rejection of claims 25 and 32, respectively, with the exception that Mazur does not teach that the HDR carrier in the HDR network and the 1xRTT carrier in the 1xRTT network correspond to the best-effort carrier in the packet-switch network and the all-service carrier in the all-service network, respectively.

However, the admitted prior art teaches a HDR carrier in a HDR network (control and data channels are time multiplexed and is optimized for best effort packet data transmission page 1, lines 25-page 2, line 5), and a 1xRTT carrier in a 1xRTT or CDMA2000 network (optimized for circuit switched services, page 1, lines 16-24).

Therefore, it would have then been obvious to one skilled in the art at the time the invention was made to modify the teaching of Mazur to include the HDR carrier in the HDR

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network and the 1xRTT carrier in the 1xRTT network, e.g. by applying the method steps applied to the 30kHz carrier in the 30kHz network and the 200 kHz carrier in the 200 kHz of Mazur to the 1xRTT carrier in a 1xRTT network and the HDR carrier in a HDR network of the admitted prior art, respectively. The motivation/suggestion to do so would have been to enable one skilled in the art to apply the teaching of Mazur in other protocols which include CDMA or some hybrid of any of the TDMA, CDMA, FDMA as suggested by Mazur (col. 4, lines 37-46).

Claims 15, 48, and 49 are terminal claims corresponding to terminal claim 43, therefore, are rejected under the same reason set forth in the rejection of claim 43 with the exception that Mazur does not teach that the HDR carrier in the HDR network and the 1xRTT carrier in the 1xRTT network correspond to the best-effort carrier in the packet-switch network and the all-service carrier in the all-service network, respectively.

However, the admitted prior art teaches a HDR carrier in a HDR network (control and data channels are time multiplexed and is optimized for best effort packet data transmission page 1, lines 25-page 2, line 5), and a 1xRTT carrier in a 1xRTT or CDMA2000 network (optimized for circuit switched services, page 1, lines 16-24).

Therefore, it would have then been obvious to one skilled in the art at the time the invention was made to modify the teaching of Mazur to include the HDR carrier in the HDR network and the 1xRTT carrier in the 1xRTT network, e.g. by applying the method steps/functions applied to the 30kHz carrier in the 30kHz network and the 200 kHz carrier in the 200 kHz of Mazur to the 1xRTT carrier in a 1xRTT network and the HDR carrier in a HDR network of the admitted prior art, respectively. The motivation/suggestion to do so would have been to enable one skilled in the art to apply the teaching of Mazur in other protocols which

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include CDMA or some hybrid of any of the TDMA, CDMA, FDMA as suggested by Mazur (col. 4, lines 37-46).

Claims 21, 59, and 60 are network claims corresponding to network claim 53, therefore, are rejected under the same reason set forth in the rejection of claim 53 with the exception that Mazur does not teach that the HDR carrier in the HDR network and the 1xRTT carrier in the 1xRTT network correspond to the best-effort carrier in the packet-switch network and the all-service carrier in the all-service network, respectively.

However, the admitted prior art teaches a HDR carrier in a HDR network (control and data channels are time multiplexed and is optimized for best effort packet data transmission page 1, lines 25-page 2, line 5), and a 1xRTT carrier in a 1xRTT or CDMA2000 network (optimized for circuit switched services, page 1, lines 16-24).

Therefore, it would have then been obvious to one skilled in the art at the time the invention was made to modify the teaching of Mazur to include the HDR carrier in the HDR network and the 1xRTT carrier in the 1xRTT network, e.g. by applying the method steps/functions applied to the 30kHz carrier in the 30kHz network and the 200 kHz carrier in the 200 kHz of Mazur to the 1xRTT carrier in a 1xRTT network and the HDR carrier in a HDR network of the admitted prior art, respectively. The motivation/suggestion to do so would have been to enable one skilled in the art to apply the teaching of Mazur in other protocols which include CDMA or some hybrid of any of the TDMA, CDMA, FDMA as suggested by Mazur (col. 4, lines 37-46).

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nittaya Juntima whose telephone number is 571-272-3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nittaya Juntima

November 10, 2005

NJ

Ricky Ngo
RICKY NGO
PRIMARY EXAMINER